WHAT IS CLAIMED IS:

1. A storage medium storing a game sound control program for a game apparatus which comprises an operating means for inputting operating information by a player; an object storing means for storing objects constituting a game image; an image display control means for displaying the game image including at least two said objects based on said operating information, said at least two objects constituting said game image each being a sound object that produces a sound; a waveform data storing means for storing at least one kind of waveform data corresponding to the sound produced by the sound object; a sound producing position storing means for storing sound producing position data indicating a producing position of the sound for each said sound object; and a microphone data storing means for storing microphone data including sound collecting position data indicating a position at which the sound is to be collected at least during the game, said game control program, comprising:

a sound volume data calculating program for calculating sound volume data of the sounds respectively produced by said sound objects based on both said sound producing position data and said microphone data;

a sound volume component dividing program for dividing the sound volume data calculated by said sound volume data calculating program into said sound volume component data of at least two directions;

an object classifying program for classifying, out of all said sound objects, the object producing the same sound; and

a sound outputting program for extracting the maximum sound volume component data for said each component of at least two directions regarding said object producing the same sound, and outputting the sound based on the waveform data of the object and said maximum sound volume component data of each component.

2. A storage medium storing a game sound control program according to claim 1, wherein

said sound outputting program includes a sound producing program for calculating localization data and the sound volume data of the sound to be output based on said maximum sound volume component data.

3. A storage medium storing a game sound control program according to claim 1, wherein

said microphone data further includes sound-collection direction data indicating a direction from which the sound is to be collected during the game, and

said sound volume component dividing program divides, based on said sound producing position data and said sound-collection direction data, the sound volume data of said sound object into right sound volume data, left sound volume data, and surround sound volume data.

4. A storage medium storing a game sound control program according to claim 3, further comprising

an object sound localization calculating program for calculating a localization of one sound based on the sounds of at least said two sound objects from said sound producing position data and said microphone data; wherein

said sound volume component dividing program divides said sound volume data of said sound object into the right sound volume data, the left sound volume data, and the surround sound volume data based on the localization of the sound calculated by said object sound localization calculating program.

5. A storage medium storing a game sound control program according to claim 3, wherein

said sound producing position data includes position data of a sound object

represented by one coordinate data, and position data of the sound object having rail data defined by at least two coordinate data; further comprising

a near coordinate calculating program for calculating coordinate data existing on a line connecting the coordinates indicating said rail data and most close to said sound collecting position data regarding the sound object having said rail data; wherein

said sound volume data calculating program calculates the sound volume data of the sound object on the basis of the coordinate data calculated by said near coordinate calculating program and said sound volume position data when calculating the sound volume data of the sound object having said rail data,

said sound volume component dividing program divides the sound volume data on the basis of the coordinate data calculated by said near coordinate calculating program and said sound collecting position data, into the right sound volume data, the left sound volume data, and the surround sound volume data.

6. A game sound control method of a game apparatus which comprises an operating means for inputting operating information by a player; an object storing means for storing objects constituting a game image; an image display control means for displaying the game image including said at least two objects based on said operating information, said at least two objects constituting said game image being sound objects that produce a sound; a waveform data storing means for storing at least one kind of waveform data corresponding to the sound produced by the sound object; a sound producing position storing means for storing sound producing position data indicating a producing position of the sound for each said sound object; and a microphone data storing means for storing microphone data including sound collecting position data indicating a position at which the sound is to be collected at least during the game, comprising following steps of:

(a) calculating sound volume data of the sounds respectively generated by said sound objects on the basis of both said sound producing position data and said microphone data;

(b) dividing the sound volume data calculated by said step (a) into said sound volume component data of at least two directions;

(c) classifying, out of all said sound objects, the object producing the same sound; and

(d) extracting the maximum sound volume component data for each component of said at least two directions regarding said object producing the same sound, and outputting the sound based on the waveform data of the object and the maximum sound volume component data of said each component.

7. A game sound control method according to claim 6, wherein

said step (d) includes a step (d-1) for calculating localization data and sound volume data of the sound output based on said maximum sound volume component data.

8. A game sound control method according to claim 6, wherein

said microphone data further includes sound-collection direction data indicating a direction at which the sound is collected during the game,

said step (b) divides the sound volume data of said sound object volume from said sound producing position data and said sound-collection direction data into right sound volume data, left sound volume data, and surround sound volume data.

9. A game sound control method according to claim 8, further comprising a step of

(e) calculating a localization of one sound from said sound producing position data and said microphone data based on the sound of said at least two sound objects; wherein

said step (b) divides said sound volume data of said sound object volume based on the localization of the sound calculated by said step (e) into the right sound volume data,

the left sound volume data, and the surround sound volume data.

10. A game sound control method according to claim 8, wherein

said sound producing position data includes rail data sound source position data represented by point sound source position data represented by one coordinate data, and the rail data defined by at least two coordinate data; further comprising a step of

(f) calculating coordinate data of a location most close to said sound collecting position data regarding the sound object having said rail data existing on a line connecting coordinates indicating said rail data; wherein

said step (a) calculates the sound volume data of the sound object from the coordinate data calculated by said step (f) and said sound volume position data when calculating the sound volume data of the sound object having said rail data,

said step (b) divides the sound volume data into the right sound volume data, the left sound volume data, and the surround sound volume data, respectively, on the basis of the coordinate data calculated by said near coordinate calculating program and said sound collecting position data.

11. A game apparatus that comprises an operating means for inputting operating information by a player, and is constructed to proceed a game according to an operation of the operating means, display a game screen including at least two objects, and produce a sound related to the game screen, comprising:

said at least two objects being sound objects which generate a sound, and a waveform data storing means for storing at least one kind of waveform data corresponding to the sounds produced by the sound objects;

a sound producing position data storing means for storing sound producing position data indicating a producing position of the sound for each said sound object;

a microphone data storing means for storing microphone data including sound

collecting position data indicating a position at which the sound is to be collected at least during the game;

a sound volume calculating means for calculating the sound volume data of the sounds by the sound objects based on said sound producing position data, and said microphone data;

a sound volume component dividing means for dividing the sound volume data calculated by said sound volume data calculating means into sound volume component data of at least two directions;

a sound outputting means for outputting the sound based on said waveform data and said sound volume component data;

an object classifying means for classifying, out of all said sound objects, the object that produces the same sound; and

a sound controlling means extracting maximum sound volume component data into each component of said at least two directions regarding the object that produces said same sound, and transferring to said sound outputting means the waveform data of the object and the maximum sound volume component data of said each component.

12. A game apparatus according to claim 11, wherein

said sound outputting means includes a sound volume calculating means for calculating the localization data and the sound volume data of the sound output based on said maximum sound volume component data.

13. A game apparatus according to claim 11, wherein

said microphone data further includes the sound collecting direction data indicating a direction at which the sound is to be collected during the game,

said sound volume component dividing means divides the sound volume data of said sound object from said sound producing position data and said sound-collection

direction data into right sound volume data, left sound volume data, and surround sound volume data.

14. A game apparatus according to claim 13, further comprising

an object sound localization calculating program for calculating a localization of one sound based on the sound of at least said two sound objects from said sound producing position data and said microphone data; wherein

said sound volume component dividing program divides said sound volume data of said sound object based on the localization of the sound calculated by said object sound localization calculating program into the right sound volume data, the left sound volume data, and the surround sound volume data.

15. A game apparatus according to claim 13, wherein

said sound producing position data includes position data of a sound object having rail data represented by sound object position data represented by one coordinate data, and rail data represented by the rail data defined by at least two coordinate data; further comprising

a near coordinate calculating means for calculating the coordinate data existing on a line connecting coordinates indicating said rail data, and in a position most close to said sound collecting position data stored in said microphone data storing means regarding the sound object having said rail data; wherein

said sound volume data calculating means calculates the sound volume data of the sound object on the basis of the coordinate data calculated by said near coordinate calculating means and said sound volume position data when calculating the sound volume data of the sound object having said rail data,

said sound volume component dividing means divides the sound volume data on the basis of the coordinate data calculated by said near coordinate calculating means and

said sound collecting position data into the right sound volume data, the left sound volume data, and the surround sound volume data.